THE RELATIONSHIP OF SELECTED ECONOMIC INDICES TO THE FAMILY LIFE CYCLE

by

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INTRODUCTION

Students of family economics often classify families into relatively homogeneous groups. Some of the more common groups have been: income, age of head, size of family, net worth, and number of children. One of the most difficult classification items to measure is the stage of the family life cycle.

Evaluation studies of the comparative well-being of families require standardization of families by their stage of growth, otherwise the data are confounded by the differences between various stages of the life cycle. Families with two members may have different needs that must be met out of the current income, depending on whether the family is looking forward to having children or whether it has already had them and they have left home. These two families have common characteristics since they have two members and their income is at a relatively low level. Yet these families are decidedly different in terms of their family needs. Unless there is a means for separating the older from the younger families, conclusions regarding their relative well-being of families classified only by size are likely to be spurious.

The purpose of this study was to determine whether there is a relationship between certain selected indices: age of wife, net worth, net income, and Sewell Scale that have been used widely in the study of economic data and the stages of the family life cycle as classified by the Morse-Johnston Scale. A secondary objective was to contrast the distribution of

families by the Morse-Johnston Scale with the distribution of families by methods used in other major studies.

FAMILY LIFE CYCLE

Rowntree (1922) published a study on poverty in York, England, and described the alternating periods of want and comparative plenty in the life of a laborer. He showed how these periods fluctuated with the presence or absence of dependent children upon the family. This was probably the first study to recognize the importance of the family life cycle.

Bigelow (1931) refined the concept of the family life cycle using seven stages related to use of money by the family: establishment of the family, acquistion cost of the children, the elementary school period, the high school period, college, a period of recovery or rediscovery, and a period of retirement. Glick (1947) suggested only four stages in the life cycle of the family: marriage, child bearing and rearing, children leaving home, and the dissolution of the family.

The entire approach of the National Conference on Family Life, held in Washington, D. C., in 1948, was based on the family life cycle, emphasizing and recognizing three major stages; beginning, expanding, and contracting families. Since that time considerable emphasis has been placed on the life cycle, and an increasing amount of statistical data concerning its effect has been made available. (Gross and Crandall, 1954, p. 116).

Since 1948, Glick (1955), Agan (1950), Bigelow (1950,

Duvall (1950), and Bonde (1950) among others have all described the family life cycle. Each has suggested different stages through which the family passes, but there is no basic conceptual difference among these formulations. They vary only in the degree of specificity with which the stages of the life cycle are described.

Definition of the Family Life Cycle

Glick (1947) defined the family life cycle as the series of changes through which the family passes from its formation until its dissolution. The family included only the parents and their children. During these stages the family may differ in size, its place of residence, employment of family members, income, and net worth.

Duvall (1950) described the family life cycle in this manner:

> The family life cycle is generated by a number of interacting processes which we can separately name and discuss but cannot dissociate in actual living. The individual man and woman begin life together at marriage, but assume the additional roles of father and mother with the birth of the first child. As successive children are born they must enlarge their roles to encompass the additional children as individual members of a growing family group. Each addition to the family brings not merely an enlargement of the family group but a significant reorganization of family living, compelling sometimes far reaching changes in the pattern of living and interpersonal relationships as well as reflecting the increasing age and maturation of all those within the family circle. The family, therefore, is never static, but always changing....

Stages in the Family Life Cycle

Glick (1955) asserts that within the life cycle of a given family certain demographic and economic changes take place. Moreover, changes in age at marriage, size of completed family, and length of life have greatly affected the pattern of family formation, development, and dissolution. The significant demographic and economic characteristic of each stage in the life cycle, and the changes in these characteristics during the past half century, within the limitations of available data, will be described.

Marriage or the Beginning Family. The beginning stage in the family life cycle is the period directly following marriage and before the first child is born. This is a period of adjustment and of formulation of the long time goals for the family.

Glick (1955) reported that the median age of a young man in the United States in 1950 entering marriage for the first time was 22.8, and the median age for the bride was 20.1 years. Both were more than a year younger than the corresponding person entering marriage ten years before. In the period from 1890 to 1940 the median age of the groom declined about two years and the bride's age only one-half year. This indicates an apparent decline in the gap between the median ages of husband and wife. Earlier marriages have become more common during recent years when married women have found it easier to gain employment. Table 1 shows the comparison age of wife and

husband in 1890, 1940 and 1950 at selected stages of the life cycle of the family.

Bigelow (1950) described the financial problems of the family in the beginning stage of the life cycle. During the establishment of the family, expenses for food and clothing are usually low and the money spent for recreation is moderate. The major financial problem is that of obtaining a home with furniture and furnishing. The family must begin to save for the future expenses of having children.

Bonde (1950) suggested that during this period of the life cycle, the family formulates its long time goals, makes plans for children and the house it wishes to own. Now, too, is the time that the family's habits of buying, whether for cash or credit, and of keeping accounts are established. Practices developed at this stage tend to remain relatively fixed throughout marriage.

Expanding or Child Bearing and Rearing Stage. The expanding family is characterized by the birth of children and the rearing of these children. Glick (1955) used the average interval between marriage and the birth of the last child for the child bearing stage. For women who had married and reached the end of their reproductive period (45 to 49 years of age) by 1952, the average number of children born per child-bearing woman was approximately 2.35. By making use of this fact in conjunction with 1950 statistics on order of birth, it is estimated that approximately half of the women would have borne their last child

by the time they are 26 years of age. Thus the median length of time between marriage and the birth of the last child is probably close to six years. Because families have declined so sharply in size, the usual span of child-bearing is approximately half as long as it was two generations ago. The figures in Table 1 will support this assumption. The average mother whose family reached completion in 1890 had borne 5.4 children with an estimated interval of ten years between marriage and the birth of the last child. Her counterpart in 1950 would have borne 2.35 children within six years after marriage.

From the time the last child is born until the first child leaves home the size of the family remains stable. Changes in family living during this period are related to the growth and maturation of the children and the changing status of the parents. (Glick, 1955)

Bigelow (1950) divided this period into three or four stages depending upon the educational status of the children in the family: the child bearing and preschool, the elementary school, the high school, and the college stages. During the child bearing or preschool stage, expenditures continue reasonably low for food and clothing. Housing may be an important item in the family budget if the purchase of a larger house is necessary. The outstanding expenses during this stage are for medical care and the purchase of equipment to save the time and energy of the homemaker.

The elementary school stage has no outstanding item of

Table 1. Median age of husband and wife at selected stages of the life cycle of the family in the U. S.: 1940, 1950, 1890.

Stages of life cycle of the family	Median age of husband: 1950	1940	1890	Median age of wife 1950	1940	1890
First marriage	22.8	24.3	26.1	20.1	21.5	22.0
Birth of last child	28.8	29.9	36.0	26.1	27.1	31.9
Marriage of last child	50.3	52.8	59.4	47.6	50.0	55.3
Death of one spouse	64.1	63.6	57.4	61.4	60.9	53.3
Death of other spouse	71.6	69.7	66.4	77.2	73.5	67.7

Source: Paul Glick "The Life Cycle of the Family". Marriage and Family Living, February, 1955, p. 4, and American Families, New York. John Wiley and Sons, Inc., 1957 Table 33, p. 54.

expenditure, but all of the expenditures increase gradually. One item often overlooked in this stage is additional saving for the education of the children. Children are beginning to bring considerable pressure for higher standards of living, perhaps set by those with whom they associate and who may come from families with larger incomes. (Bigelow, 1950)

For most families the high school stage brings the heaviest demand on the family income. All expenses increase rapidly. Clothes assume a new importance for the family members, and expenditures that are important for the children's social development receive emphasis. The family may find it necessary to use part of the family savings during this stage. College is not always a part of the family life cycle; it depends upon the standard

of living of the family. But if college is a part of the family's standard then the expenditures for the family are at their maximum especially if the children live away from home. (Bigelow, 1950)

The Contracting Family or Children Leaving Home Stage. The contracting family is characterized by children becoming financially and physically independent and reducing the family to the original two members. One of the most significant changes in this phase of the family life cycle is the change in the length of time that married couples live together after their children leave home. In 1890 there was a 50-50 chance that one spouse or the other would die at least two years before the youngest child married. More recently, because of the combined effect of earlier marriage, smaller families, and longer average length of life, the couple may live together an average of 14 years after the last child leaves home. (Glick, 1955)

Bigelow (1950) suggested that when children leave home a period of recovery follows. As the children finish high school or college and become self-supporting, current expenses drop rapidly but the family's finances need replenishing. Savings are often depleted and old age and retirement are close. Therefore, for the second time in the life cycle of the family, accumulation for the future, both in investments and equipment, will take a large share of the family income. The children may also need help in making a satisfactory adjustment in their chosen vocations.

Bonde (1950) in discussing this period describes the home as a launching center. The children are being established in their vocations and their home. The family finds that weddings for the daughters, and helping the children become established in their vocations are an important part of their financial plan.

Retirement and the Dissolution of the Family. This is a period in the life cycle when social security benefits begin, wills and the disposition of estates are important considerations, less income is needed to maintain a given level of living than that needed by a young couple because the retiring family has the accumulations of a lifetime. Glick (1955) confines the last phase in the life cycle to the dissolution of the family when one of the two marriage partners dies. Bigelow (1950), however, recognizes a period of retirement preceding dissolution as the period when income is relatively low. Current expenses in this period are usually moderate. Food intake, wear and tear on clothing, and housing expenses are low, but often adequate provision for personal service is the item of expense which may run high for elderly families.

Bonde (1950) reports that due to the changes in attitudes toward the responsibility of one generation to another, the families are increasingly dependent on their own resources during the retirement period. Therefore, families must be concerned about financial planning for the retirement period early in the life cycle.

CHANGES IN ECONOMIC CHARACTERISTICS OF THE FAMILY

As the family passes from one stage of the life cycle to another, the economic characteristics of the family also change. Two major economic characteristics, income and net worth, within limitation of available data, will be described.

Family Income

Family income is the income of all family members added together. (Kyrk, 1953, p. 38). Income can be in the form of money or in the form of goods and services received. Income distribution of families are affected not only by changes in rates of earning, but also by changes in the size and composition of the family and particularly by the number of family members in receipt of income. (Kyrk, 1953, p. 83).

Family Income Related to Age of Family Head. Families in various stages of the life cycle have different levels of income. Data supporting this statement are presented in Tables 2 and 3. The husband of the newly formed family has limited work experience and the family income is relatively low. Within about ten years of marriage, however, the family income generally has increased about one-third. When the husband is between the ages of 35 and 54, the wife may have returned to the labor force, or when some of the older children living with their parents may be working the family income is at its peak. The peak is usually about 40 percent above the level of that of the newly formed family. After the family head has passed the age of 65 the family

Table 2. Comparison of family income by age of head, 1954.

Age of head	All families (Income $)	Rural families Income $)	Urban families Income $)
14 to 24	3,136		3,435
25 to 34	4,255	2,196	4,506
35 to 44	4,657	2,396	5,049
45 to 54	4,811	2,630	5,298
55 to 64	4,052	1,787	4,767
65 and over	2,294	1,091	2,875

Source: United States Bureau of Census, Current Population Reports. Consumers Income, p-60, No. 20, Table 4.

has only one-half of its peak income. (Glick, 1955)

The same pattern of income seems to hold for both rural and urban families despite the lower rural incomes, according to data published by the United States Bureau of Census, Current Population Reports, Consumer Incomes, p. 60, No. 20, Table 4. (Table 2)

Clague (1948) made this observation about the pattern of the family income:

> It has been observed that there is a tendency for earning of the individual working man in the American economy, as he progresses through his working life, to increase and decrease approximately when his family responsibilites increase and decrease. The young man entering the labor force earns a relatively low "beginner's wage" at a time when he is usually contributing to the maintenance of an older family or has only himself to support. By the time he marries and assumes responsibility for his own family, the chances are that he has gained experience and earning power and may continue to gain through the period of dependency of his children. If his earnings begin to decline as he passes middle age, so, typically do his responsibilities. This generalization is substantiated by studies of family incomes since 1935.
>
> This pattern reflects average experience; it is by no means automatic and universal.

Table 3. Characteristics of married couples by age of husband for the United States; 1952.

Age of husband	% of couples with no own children under 18 at home	Own children under 18 at home per couple with children	% of husband who moved during preceding year	% of couples with husband and wife in labor force	Median Total money income per family
Under 25 years	42.4	1.51	55.8	24.9	$3,069
25 to 34 years	20.9	2.08	32.9	24.9	4,030
35 to 44 years	20.9	2.46	18.2	29.5	4,339
45 to 54 years	49.4	2.08	10.3	30.9	4,355
55 to 64 years	79.6	1.71		20.5	3,805
65 and over	96.2		6.6	6.5	2,276
Total for all ages	44.8	2.15	20.2	24.5	3,890

Source: "The Life Cycle of the Family" by Paul Glick. Marriage and Family Living, February 1955.

Family Income Related to Size of Family and Number of Children. The composition of the family and the size of the family are both important in determining the economic welfare of the family. Gross and Crandall (1954, p. 148) suggested that when families are classified by the number of children under 18 years of age rather than size of family that the median income is lower when classified by number of children rather than size. The size of family in contrast to number of children plus parents may include other adults. Support of this statement is to be found in Table 4. Note size of family 4 and larger and number of children two and over.

Kyrk (1950) stated that:

> The census reports on the distribution of individuals and families by money income disclose in considerable detail the disparity in the size of the recipients units and the age composition of those including two or more persons within each income class and the differences in these respects among the income classes. They are the sort that might be deduced from the definition of income and recepient unit. They result in a marked disparity in command over goods by the persons included in each income class before taking income differences as a measure of the difference in economic welfare of their respective constituents.

Net Worth

Net worth may be defined as the difference between assets and liabilities. Net worth reflects the net accumulation of savings and indebtedness over a period of years; both of low income and financial reverses of some years and the high incomes and savings of others. Several aspects of net worth have been used in research studies: liquid assets, indebtedness, savings,

Table 4. Comparison of family income by size of family and number of children under 18.

Size of family	Median family income	Number of children under 18	Median family income
2	2,800	none	3,216
3	3,432	1	3,442
4	3,675	2	3,484
5	3,687	3	3,346
6	3,543	4	3,144
7	3,208	5	2,705
		6 or more	2,448

Adapted from Table 4-5, p. 24-25. Current Population Reports Consumer Income, U. S. Bureau of Census p. 60, No. 9 (March 25, 1952).

and the total net worth of spending units.

One aspect of a study done by the United States Department of Agriculture, made to obtain data on economic security and retirement plans for farm families, was to determine the net worth of farm families. It was reported that "traditionally, the principal components of the net worth of farm operators have been equity in their farm business, consisting of land, building machinery, and livestock. For many farmers the farm enterprise still represents the sole method of saving and investing money".

Net Worth of Spending Units. The Survey of Consumer Finance (1950) reported that spending units headed by persons in the older age groups, more frequently had a higher net worth than other age groups. A spending unit in the Survey was defined as a person or groups of persons who live together, are related

by blood, marriage, or adoption and who pool their incomes for the major part of their expenditures. More than half of all consumer spending units headed by persons 45 years of age or over has a net worth of at least $5000. In comparison, about one-fourth of the spending units headed by persons less than 45 years of age had a net worth of $5000. Negative net worth was most frequent among the younger consumer spending units, those headed by persons under 35 years of age. This general pattern of increased net worth for older groups results partly from the large outlays by young married couples for basic household equipment such as furniture and appliances that are not included in net worth. The older age groups have had greater opportunity to save for a longer period of time and to gain more appreciation of their capital assets.

Goldsmith (1956, p. 135) confirmed this pattern of increased net worth for older families. Six age groups were selected: 18 to 24, 25 to 34, 35 to 44, 45 to 54, 55 to 64, and 65 and over. The lowest median net worth of families was among families in the first age group; the median net worth increased gradually until it reached its peak in the age group 55 to 64; after 65 years of age the median net worth of families declined but only slightly.

Net Worth of Farm Families. The net worth of farm families tends to follow the same pattern as that of spending units. Heady, (1953, p. 398), in a study of Iowa farm families related certain aspects of net worth to the age of the farm operator.

The operator age was assumed to be highly correlated with the family life cycle, so a sample of 144 farm families, stratified by five age groups was selected. The components of net worth studied were: the value and the amount of land owned, the investment in livestock and farm machinery, and the amount and kinds of indebtedness of the farm family.

The largest quantity of land was operated by the middle age farmer. The smallest quantity was operated by both the youngest and oldest families. Heady et al. (1953, p. 401), reported that the average number of acres operated was 120 at operator age 25, and increased to a maximum of 196 acres at operator age 48 before declining to about 120 acres at age 70. The investment in livestock and farm machinery, and the value of land owned, all of which are important components of the net worth of the farm family, follow this same pattern. Two reasons are suggested for the rise and decline of land holdings: (1) the quantity of other assets available for combining with the land and (2) the preference of farm families for the use of capital for family living or the farm enterprise.

The amount and kinds of indebtedness for farm families also vary from one age group to another. Farm families have two types of indebtedness; (1) for production and (2) for the purchase of real estate. A large percentage of young farm families have indebtedness for production capital, but this type of indebtedness decreased as the age of the operator approached middle age. The percentage of farm families with real

estate indebtedness reaches a peak during middle age and is usually lowest for the younger families. (Heady, 1953, p. 419).

Liquid Assets in Relation to Net Worth. Fisher (1952, p. 84) classified families by the age of the head: 18 to 24, 25 to 34, 35 to 44, 45 to 64, and 65 years of age and over. Liquid assets were defined to include bank accounts and United States government bonds. Fisher reported that the average holdings of liquid assets do not vary with age in exactly the same manner as do average incomes. Income depends on current earning power while liquid assets also reflect past earning power; the period in which the spending units could accumulate their savings and decide on what to do with their savings. The holdings of liquid assets are low in the younger age group, increased through the 35 to 44 age groups, continued to rise through middle age, declined only during old age and then only moderately.

Fisher (1952, p. 102) suggested that information on average liquid assets suggests an overall life cycle pattern. However, size distributions of liquid asset holdings suggests that different life cycle patterns might be found by classifying families by other characteristics than was possible in her study.

METHODS OF CLASSIFYING FAMILIES

In the previous section the family life cycle concept has been defined and data characterizing each stage have been cited. Family size, age of family members, income, and net worth are closely related to family life cycle. These individually and

in combination have been used as a basis for classifying families in all major studies of family income, expenditures, and savings. The methods employed by these major studies will be described to help show their value in relating family economic data to family life cycle.

The first comprehensive estimate of the distribution of families by income was made by the National Resource Committee for the year 1935-36 based on field studies conducted by the Bureau of Labor Statistics and the Bureau of Home Economics. The study was known as the Consumer Purchase Study. Families were classified into nine family types. Monroe in 1940 analyzed the 1935-36 data for the relation of family spending and saving to the age of the wife and the number of children. She developed another method of classifying families which will be described later.

Beginning in 1945 the Bureau of the Census has published annually estimates of the distribution of families by the amount of their money income based on sample studies. These are known as the Current Population Reports, Consumer Income, Series P-60. Their classification of families is traditional and will not be discussed. The Board of Governors of the Federal Reserve System began in 1945 the annual "Survey of Consumer Finances". Several methods of classifying families have been employed during the past few years. The Bureau of Labor Statistics in 1950 conducted a Survey of Consumer Expenditures, Income, and Savings. The data have been analysed for significance by family

characteristics.

Each of the cited methods of classifying families will be described and their relationship to the family life cycle noted. In addition a socio-economic scale for classifying families developed by Sewell will be discussed.

The Consumer Purchase Study Classification

An extensive study of family income and expenditures was conducted jointly by the Bureau of Labor Statistics and the Bureau of Home Economics for the years 1935-36. Families eligible for inclusion in this study consisted of husband and wife, native white (except in the South) families married at least one year, and keeping house when interviewed. Families were classified into nine family types, based on the number of family members and the age of the family members other than husband and wife. Children were grouped as over or under sixteen years of age. The nine types of families and their characteristics are:

Family Type	Number of persons (including husband and wife)	Persons other than husband and wife
I	2	None
II	3	1 child under 16
III	4	2 children under 16
IV	3 or 4	1 person, 16 or older with or without 1 other persons regardless of age

V	5 or 6	1 child under 16, 1 person 16 or older and 1 or 2 others regardless of age
VI	5 or 6	3 or 4 children under 16
VII	7 or 8	1 child under 16, 4 or 5 others regardless of age
VIII	5 or 6	3 or 4 persons 16 or older
IX	7 or more	5 or 6 persons 16 or older, or 7 or more persons regardless of age

U. S. Department of Agriculture, Family Income and Expenditures, Farm Series, Misc. Pub. No. 465, p. 355.

Using this method of classification all two member families fall into one type. A two member family could be a beginning family, a family in the recovery stage, or a family that has no children and plans to have no children. The needs and wants of these three types are very different.

Monroe (1940), using the 1935-36 Consumer Purchase Study data, made a special analysis of family spending and savings as related to the age of the wife and number of children. For this purpose it was necessary to modify considerably the basic nine types. Childless families were classified by the age of the wife, and families with children were classified by number of children and certain age combinations. She developed sixteen family types:

Five groups of families with no children:

Wife under 30 years of age
Wife 30 to 39 years of age
Wife 40 to 49 years of age
Wife 50 to 59 years of age
Wife 60 years of age or older

Families with one child were classified according to the age of the child:

Child under 2 years of age
Child 2 to 5 years of age
Child 6 to 11 years of age
Child 12 to 15 years of age
Child 16 to 29 years of age

Families with two children were classified into five groups based on certain combinations of the children's age:

Older child under 5 and younger child under 5
Older child 6 to 11 and younger child 2 to 11
Older child 12 to 15 and younger child 6 to 15
Older child 16 to 29 and younger child 12 to 15
Older child 16 to 29 and younger child 16 to 29

Families with three or four children, all under 18 years of age, were classified into one group. Otherwise the family was excluded from classification.

This system of classification is not complete and excludes from classification some of the multi-child families.

The Study of Consumer Expenditures, Income and Savings Classification, 1950

The basic data for the Survey of Consumer Expenditures Income and Savings were collected by the Bureau of Labor Statistics. Further analysis of these data was undertaken by the Wharton School of Finance with the support of the American Economics Association and the American Statistical Association. This is a more detailed analysis of family economics than any previously made. Families were classified by 21 family

characteristics and combinations of them. Some of the characteristics used were: average net money income, occupation of family head, family size, family type, race, age of family head, education of family head, and number of full time earners in the family.

The family types were based on the relationships of family members and the age of children. The five basic family types were: (1) husband and wife only, (2) husband and wife families (no other adults present) by the age of the oldest child, (3) families with children and only one parent present, (4) adult groups other than husband and wife and individuals not in family group, and (5) families with children in which adults other than parents are present.

The type (2) family was further sub-divided according to the age of the oldest child and the number of children in the family. The four age groups were: oldest child under 6, 6 to 16, 16 to 18, and 18 and over. Each of these were further sub-divided according to the number of children. In the group with the oldest child under 6, there were five groups; one infant, one child, two children, three children, and four or more children. In the other three groups there were four divisions: one child, two children, three children, and four or more children.

This classification comes the closest to recognizing the stages in the life cycle. For example the age classes tend to represent preschool, grade school, high school, and college

periods. The age of the oldest child represents the advanced stage in the life cycle scale that the family is currently experiencing and reflects the stages through which the family has come. Without reference to the age of the youngest child, however, the stages which the family will experience are not evident.

Survey of Consumer Finance Classification

The Board of Governors of the Federal Reserve System in their Survey of Consumer Finances has used several methods to classify families into types in order to study the economic position and attitudes of the spending units in the United States. In 1950, families were classified by the age of head or by the number of years of marriage. Beginning in 1955, however, families have also been classified by the age of the head and the presence and absence of children under 18 years of age. Only four groups are stated:

Age of head 18 to 44, no children under 18
Age of head 18 to 44, children under 18
Age of head 45 and over, no children under 18
Age of head 45 and over, children under 18

Source: Survey of Consumer Finance. The Financial Position of Consumers. June 1955. Supplementary Table I. p.6.

Socio-economic Status Scale

Sewell (1943) defined socio-economic status as "the position that an individual or family occupies with reference to the

prevailing average standard of cultural possessions, effective income, material possessions and participation in the group activities of the community". Sewell originally introduced a scale for measuring the socio-economic status of farm families in Oklahoma in 1940. There were 36 items in the scale and they were related to the four major components of the socio-economic status of the family. In 1943, Sewell revised the scale into a shorter form that would be easier to use in classifying families. Items were selected which field experience had shown to be the most easily and accurately obtained, and which possessed sharp diagnotic capacity at varying levels of socio-economic status in varying culture areas. There were 14 items in this short form. (Form I). The scale was tested in three states, Oklahoma, Kansas, and Louisiana, to see if it were possible to measure the socio-economic status of farm families in other states with the same scale. The short form was validated in Oklahoma by a correlation between the ratings produced by it and those produced by the original scale (Sewell, 1943).

Blecher and Sharp (1952) found that items on church attendance were not closely correlated with the socio-economic scale. As a result, the two items on church attendance were excluded from consideration in this study and twelve items were used in the short form.

This completes a brief review of most of the major methods employed for classifying family groups. None adequately reflects

the stages in the life cycle for which the family must plan; most were not so intended. These have been rather extensively discussed, however, because they are the major methods of classifying families and are compared with the Morse-Johnston scale which was developed to reflect, presumably, the least advanced family life cycle stage that the family has experienced.

PROCEDURE

Sampling Procedure

The data used in this study were collected in 1956 as a part of the Kansas Agricultural Experiment Station Project, Organized Research 427, "Economic Status and Plans for Future Security of Farm Families". The data was applicable for the year 1955. The sample for this research project was obtained by selecting at random three rural counties in each of the ten economic areas of Kansas delineated by the 1950 census. Within these 30 counties, three rural townships were chosen at random. Ten families in each of the three townships were chosen from the listed names of the county assessor's record, taking the nth name beginning with a random start.

Families to be interviewed had to be complete with a husband and wife. Broekn families and other types of families were not interviewed. Therefore, the family used in this study meets the U. S. Bureau of Census definition of a primary family: the husband and wife with or without children living at home

Form 1. Socio-economic scale and scores*.

1. Construction of house:
   Brick, stucco, etc. or painted frame Score (5) | Unpainted frame or other (3)

2. Room-person Ratio:
   Number of rooms / Number of persons

Ratio:	below 1.00	1.00 to 1.99	2.00 and up
Score	(3)	(5)	(7)

3. Lighting facilities:

	Electric	Gas Mantle Pressure	Oil Lamp or other
Score	(8)	(6)	(3)

4. Water piped into house?
   Yes (8) No (4)

5. Power washer? Yes (6) No (3)

6. Refrigerator:

Mechanical	Ice	Other or none
Score (8)	(6)	(3)

7. Radio? Yes (6) No (3)

8. Telephone? Yes (6) No (3)

9. Automobile (other than truck) Yes (5) No (2)

10. Family takes daily newspaper? Yes (6) No (3)

11. Wife's education:

Grades completed	0-7	8	9-11	12	13 and up
Score	2	4	6	7	8

12. Husband's education:

Grades completed	0-7	8	9-11	12	13 and up
Score	2	4	6	7	8

Source: Sewell, W. H. "A Short Form of the Farm Family Socio-economic Status Scale", Rural Sociology, June, 1943.

*The scores are given in parenthesis.

and related to the head of the family by blood, marriage or adoption.

For the purpose of this study, data from one county in each of the ten economic areas were used. From the potential 300 families there were 178 usable schedules. The data used have not been corrected for sampling error.

Methods of Tabulation

Only those parts of the schedules pertaining to the characteristics of the family life cycle and certain selected financial characteristics such as net worth, net farm income, net family income, and inheritance, were tabulated.

Method of Tabulating Selected Family Characteristics. Data were tabulated on certain selected characteristics of the family, namely, the family size, age of wife, age of husband, number of children and years of marriage. In tabulating family size, the family was defined as the husband and wife with or without children living at home. The children included sons, daughters, stepchildren, and adopted children regardless of age or marital status, but excluded children no longer living at home. This conforms, as previously stated, to the United States Bureau of Census with the definition of the primary family. One exception was made: if the child was still financially dependent upon the family, as they are when in college, he was included as a member of the family. The actual number of persons in the family was tabulated for family

size.

The ages of the husband and wife were tabulated into fourteen age groups in five year brackets beginning with age group under 20 and ending with the group 85 and over. Children in the family were tabulated by the number of independent children and by the number of dependent children in the family. The dependent children were reclassified into chronological age or school status groups: infants or children under two years of age, preschool or children under six, grade school children, those children in the first to the eighth grades inclusive, high school students from ninth to twelfth grades, children in college or in special schools after finishing high school, and finally, those children over high school age and still living at home. The years of marriage tabulated were the actual number.

Tabulation Methods for the Economic Characteristics of the Family. Information concerned with four economic indices of the family was tabulated: the net worth of the family, the net farm income, the net family income, and the amount of inheritance.

Net worth for the families was determined by the families estimating their total assets and total debts from a suggested list of assets and liabilities. The difference between these figures was the net worth of the family. The value of the insurance policies of the families was not included in the net worth figures. Assets of the families included in the suggested list were: farm land and improvements, non-farm real estate,

livestock, farm machinery, automobile, retirement annuity, U. S. Government bonds, other bonds and stocks, savings in bank, building and loan, co-op shares, creditunion shares, money in checking accounts, value of household goods, and inventory value of livestock, crops, and products that the farm family had at the close of 1955. The family estimated the resale or cash value of these items. Liabilities included debts on farm land and improvements, non-farm real estate, livestock, farm machinery, automobiles and any other debts that the family had on life insurance, medical and hospital expenses, or household equipment. The actual amount of net worth for the families was tabulated.

Net income from farming was an estimate of the family income from farming. Twenty brackets were used beginning with a net loss of $5,501 or more, increasing by $1,000, and ending with a net income of $20,501 or more. A copy of the code used may be found in the appendix. The mid-point in each bracket was used in determining total and average income. Total family income was computed by asking if the family had other sources: labor on other farms, custom work on other farms, non-farm work, oil and gas leases or royalties, annuity, interest and dividends, rent, boarders and roomers, old age assistance, pensions, veteran's allowances, social security, unemployment compensation, teaching, nursing, office work, and agricultural program payments. The estimated income of all family members from these sources was added to the farm income. The same 20 brackets of income

were used in the tabulations.

Question 36 and 37 of the schedule, a copy of which is in the appendix, dealt with the inheritance that the family received. In tabulating results, four brackets for the amount of inheritance were used beginning with 0 to $1,000 and ending with $25,001 or more. To determine average inheritance the mid-point in each bracket was used.

Classification of Families. The families were classified by six methods: the Consumer Purchases Study of 1935-36; Monroe's sixteen types, Survey of Consumer Finances, the Study of Consumer Expenditure, Income and Saving 1950, the Sewell scale and the Morse-Johnston Scale. The first five methods have been described in detail in the review of literature.

The sixth method of classifying families grouped them by selected characteristics which presumably indicated the stages of the life cycle. The stages recognized were: beginning, infant, preschool age, grade school age, high school age, college age, recovery, retirement, and childless, not planning children. For families with children the classification was based on three factors: the age of the youngest child, whether the family was complete, and the number of children in the family. To determine if the family was complete the answer to question 6 was utilized: "Is it likely that in the next 5 or 10 years that your family will need to meet any large expenditure-this was followed by 11 items and item "i" was: cost of child birth? If the answer was yes or uncertain the

family was considered incomplete or planning for additional family members. Childless families were grouped into three groups: families that were planning children, families that were not planning children, and families whose children were independent. The families with independent children were considered to be in the recovery or retirement stages of the life cycle; childless families planning were classed as beginning; and childless families not planning children were classed as such.

The following scale was used in classification of the families. The scale was prepared with the guidance and assistance of Dr. Richard L. D. Morse. The first digit in the code number, except the 70's, 80's and 90's, indicates the stage of the life cycle and the second digit indicates the number of children and whether the family is complete or not. The even numbered families were planning additional children and the odd numbers indicate a completed family. Of the families in the sample, 32 percent were two member families and code numbers 70 through 91 were used to divide these families into groups of like characteristics. These families were classified by the age of the wife.

In using the scale several changes were made because of the small number in the sample. Since there were no families classified with code numbers 40 to 47, these numbers were not used. There was only one family with the youngest child in college and this family was grouped with the 60 to 67 groups

or those families with college age students living at home. The code numbers 70 through 77 were to be used for families married five years or less with no children. There were only three families coded 70-77 so they were grouped with the 80 to 91 groups and years of marriage were not considered in the classification of the families.

For use in this study, with the small number of families included, an abbreviated form was used. The stages of the life cycle used were: the beginning families (newly married and planning children), families with an infant, families with preplanning children), families with an infant, families with pre-school children, families with grade school age, high school age, college age students, families in the recovery period, and the childless families who never had and were not planning children. Data regarding the number of children present and ever had were not included in this study. The distinction between families planning and not planning children was not made because of lack of numbers, however, its potential use is shown in Table 10 and referred to in the text under the heading-families that are planning and not planning children. There were no "retired" families.

Morse-Johnston Scale--included only those children living at home.

Family with an infant (under 2 years of age)

One child under 2, no other children, planning	00
One child under 2, no other children, not planning	01
Youngest child under 2, 1 other child, planning	02
Youngest child under 2, 1 other child, not planning	03
Youngest child under 2, 2 other children, planning	04

Youngest child under 2, 2 other children, not planning 05
Youngest child under 2, 3 or more other children, planning 06
Youngest child under 2, 3 or more other children, not planning 07

Family with preschool child (under 6 years of age)

One child under 6, no other children, planning 10
One child under 6, no other children, not planning 11
Youngest child under 6, 1 other child, planning 12
Youngest child under 6, 1 other child, not planning 13
Youngest child under 6, 2 other children, planning 14
Youngest child under 6, 2 other children, not planning 15
Youngest child under 6, 3 or more other children, planning 16
Youngest child under 6, 3 or more other children, not planning 17

Family with Grade School Children (1st to 8th grades)

One child in grade school, no other children, planning 20
One child in grade school, no other children, not planning 21
Youngest child in grade school, 1 other child, planning 22
Youngest child in grade school, 1 other child, not planning 23
Youngest child in grade school, 2 other children, planning 24
Youngest child in grade school, 2 other children, not planning 25
Youngest child in grade school, 3 or more other children, planning 26
Youngest child in grade school, 3 or more other children, not planning 27

Family with High School Children (9th to 12th grades)

One child in high school, no other children, planning 30
One child in high school, no other children, not planning 31
Youngest child in high school, 1 other child, planning 32
Youngest child in high school, 1 other child, not planning 33
Youngest child in high school, 2 other children, planning 34

Selected items were cross tabulated to determine the relationship between various methods of classification of families. The Consumer Purchase Study, Monroe's 16 family types, the Survey of Consumer Finance and the Study of Consumer Expenditures, Income and Saving 1950 methods of classification were cross-

tabulated with the Morse-Johnston Scale.

Families classified by age of the wife and the Morse-Johnston Scale were cross-tabulated with total family income, net worth, number of children, and Sewell scale. The total frequencies, sums, means, and percentage were computed.

RESULTS

Comparison of the Methods of Classifying Families

The purpose of this section was to show how the 178 families were distributed by each of the methods of classification, and to show how the distribution of each of the four major methods related to the Morse-Johnston Scale. The distribution of the families by the Sewell Scale was then discussed. Some highly tenative indications of the possible influences of the planning and not planning portions of the Morse-Johnston Scale were included.

The Consumer Purchase Study. When the Consumer Purchase Study method of classification was compared with the Morse-Johnston Scale it was found that families in types II through IX could be families in any phase of the life cycle. For example the family with one child under 16 (Type II) could be a family with an infant, a grade school student, or a high school student. The family expenditures of these three types of families are very different. The two member families were all classified into one family type in the Consumer Purchase Study, with no

distinction between the beginning families and the families in the recovery stage. Table 5 shows a comparison of this type of classification and the Morse-Johnston Scale.

Monroe's Sixteen Family Types. The comparison of families grouped according to Monroe's 16 family types with the Morse-Johnston Scale (Table 6) indicated that families with one child are classified by age of child (Types VI through X) and thus do reflect the stage of the life cycle. Families with three or four children are classified into one type (XVI) which does not reflect any specific stage of the life cycle.

It was impossible to classify some of the families into any of these 16 types, for example, families with more than four children and some of the two-children families. Some two-children families had children of ages that did not fit into the specified combinations.

The Survey of Consumer Finance Classification. Families classified into Types II and IV of the Survey of Consumer Finance Classification when cross-tabulated with the Morse-Johnston Scale could be in several stages of the life cycle. Table 7 shows a comparison of these two methods of classification. In classifying the two-member families by these two methods both methods group beginning families into separate groups but the Survey of Consumer Finance made no distinction between families that have had children and are in the recovery stage of the life cycle and those families that have no children and have never had children.

Table 5. Husband-wife families classified by the Consumer Purchase Study Type and the Morse-Johnston Scale.

Consumer Purchases Study Family Types	Morse-Johnston Scale-stages of life cycle								
	Child-less and planning	Infant	Pre-school	Grade	High	Col-lege	Recov-ery	Child-less not planning	Total
No children	4						39	14	57
1 child under 16		4	3	10	2				19
2 children under 16		5	3	8	1				17
1 person, 16 or older, with or without 1 other		1	1	11	10	11			34
1 child under 16, 1 person 16 or older, and 1 or 2 others		2	1	7	1				11
3 or 4 children under 16		15	11	8		1			35
1 child under 16, 4 or 5 others		2		1					3
3 or 4 persons 16 or older									
5 or 6 persons 16 or older, or 7 or more persons regardless of age		1		1					2
Total	4	30	19	46	14	12	39	14	178

Table 6. Husband-wife families classified by Monroe's sixteen types and the Morse-Johnston Scale.

Monroe Family Types*	Morse-Johnston Scale-stages of life cycle								
	Beginning	Infant	Preschool	Grade	High	College	Recovery	Childless	Total
I	4								4
II								2	2
III							7	5	12
IV							13	3	16
V							19	4	23
VI		4							4
VII			3						3
VIII				4					4
IX				4	4				8
X					6	10			16
XI		6							6
XII			4	8					12
XIII				6					6
XIV				7					7
XV					2	1			3
XVI		16	12	11		1			40
XXX		4		7	1				12
Total	4	30	19	46	14	12	39	14	178

*Description of family type in review of literature.

Table 7. Husband-wife families classified by the survey of Consumer-Finances and the Morse-Johnston Scale.

Survey of Consumer Finance Family Type	Morse-Johnston Scale-stages of life cycle							
	Child-less and planning	Infant	Pre-school	Grade	High	Col-lege	Recov-ery	Child-less not planning	Total
Head under 44 no children	4								4
Head under 44 children under 18		29	15	23	4	3			74
Head over 44 no children							39	14	53
Head over 44 children under 18		1	4	23	10	9			47
Total	4	30	19	46	14	12	39	14	178

The Study of Consumer Expenditures, Income and Saving, 1950. A comparison of the Consumer Expenditures, Income and Saving (C.E.I.S.) method of classification with the Morse-Johnston Scale (Table 8) was difficult to reconcile because the basis for the C.E.I.S. was the age of the oldest child in the family and the Morse-Johnston Scale used the age of the youngest child. A family whose children range in age from infant to college would be classified as a family with an infant in the Morse-Johnston Scale and as a family with the oldest child over 18 years of age by the other method. If the number of children in the family were disregarded in the C.E.I.S. and the four age groups of children were compared with the Morse-Johnston Scale, there were only 27 families that would be grouped in the same groups by both of these methods of classification.

Families that are Planning and not Planning Children. The Morse-Johnston Scale provides opportunity for distinguishing families that are planning and not planning children. The number of families used did not justify the use of this additional distinction among families so the Morse-Johnston Scale was modified in the study. But from the data it was suggested families who were planning children were those families with the wife under 44 years of age. The percentage of families planning children tends to decrease as the wife approached this age. One hundred percent of the families with the wife under 30 years of age were planning additional

Table 8. Husband-wife families classified by the Consumer Expenditures Income and Saving classification and Morse-Johnston Scale.

Family Types Con. Exp. Method	Morse-Johnston Scale-stages of life cycle: Childless and planning	Infant	Pre-school	Grade	High	College	Recovery	Childless not planning	Total
I - oldest child under 6 one infant		3							3
II - oldest child under 6, 1 child		1	3						4
III - oldest child under 6, 2 children		6							6
IV - oldest child under 6, 3 children		2							2
V - oldest child under 6, 4 or more children									
VI - oldest child 6-16, 1 child				10	3				13
VII - oldest child 6-16, 2 children			4	10					14
VIII - oldest child 6-16, 3 children		8	9	3	1				21
IX - oldest child 6-16, 4 or more children		7	1						8
X - oldest child 16-18, 1 child					6				6
XI - oldest child 16-18, 2 children				5	1				6
XII - oldest child 16-18, 3 children				6					6

Table 8 (concl.)

Family Types Con. Exp. Method	Morse-Johnston Scale-stages of life cycle: Childless and planning	Infant	Preschool	Grade	High	College	Recovery	Childless not planning	Total
XIII - oldest child 16-18, 4 or more children		1	1	2					4
XIV - oldest child 18 or over, 1 child						8			8
XV - oldest child 18 or over, 2 children				4	2	2			8
XVI - oldest child 18 or over, 3 children		1	1	2	1	1			6
XVII - oldest child 18 or over, 4 or more children		1		4		1			6
XVIII - no children	4						39	14	57
Total	4	30	19	46	14	12	39	14	178

children, regardless of the number of children in the family. But only 22 percent of the families with the wife in the age group 40 to 44 were planning children. (Fig. 1)

When families were classified by the Morse-Johnston Scale, 97 percent of the families, with the youngest child an infant, were planning children, but only 7 percent of the families where the youngest child was a high school student were planning children. Figure 2 shows a comparison of the percentage of families planning children based on the age of the wife and the Morse-Johnston Scale. From the data it was not possible to determine which is the more important factor in determining whether the family is complete: the age of the wife or the age of the youngest child.

Socio-Economic Characteristics Compared

Relative Distribution. Income, net worth, Sewell Scale and number of children frequently are used to characterize families. These are related to the age of the wife and the Morse-Johnston Scale by comparing the relative distribution of families. First discussed is the percentage distribution of families by income, Sewell Scale, net worth, and the number of children by the age of wife. This is followed by a similar distribution based on the Morse-Johnston Scale in place of age of wife.

Income was not a distinguishing characteristic in classification of families. The percentage of total income tended

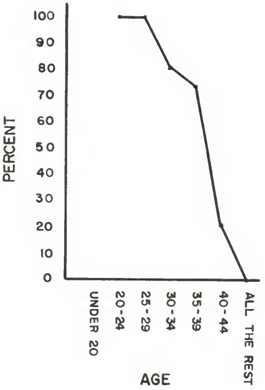

Fig. 1. Percentage of families planning children, based on age of wife.

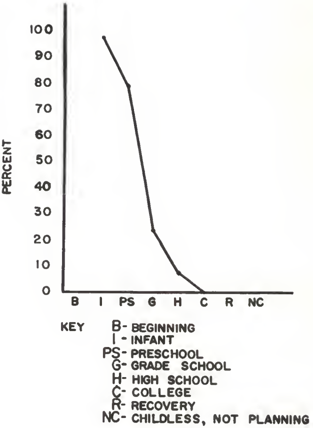

Fig. 2. Percentage of families planning children, based on Morse-Johnston Scale.

to equal the percentage of families in each age group. Table 9 and Fig. 3 shows these percentages are closely related to one another. Families with wives under 45 years of age account for 55 percent of the families and 54 percent of the income. (Table 9).

The percentage of total Sewell score likewise was closely related to the percentage of families in each of the groups when classified by the age of the wife. Families with wives under 45 accounted for 55 percent of the families and 54 percent of the Sewell score. (Table 9 and Fig. 3). It was not a distinguishing characteristic.

When the percentage of total net worth was compared to the percentage of families it was found that families with wives under 45 years of age accounted for 55 percent of the families but only 39 percent of the net worth. This same group had 80 percent of the children in the sample.

When families were grouped by the Morse-Johnston Scale the percentage of the income and the Sewell score were closely related to the percentage of families in each of the stages, but the percentage of net worth and number of children accounted for these families varied considerably. The 30 percent of the families with children under school age have 48 percent of the children but only 20 percent of the total net worth of the families. However, the 22 percent of the families when children have left home or are in the recovery stage have none of the children and 24 percent of the net worth of families. Table 10

Table 9. Percentage comparison of net worth, income, Sewell Scale, number of children, and number of families by age of wife.

Age of wife	Percent of families	Percent of children	Percent of Sewell Score	Percent of income	Percent of net worth
Under 20	1	-	1	-	-
20 to 24	4	4	4	3	1
25 to 29	8	14	8	8	3
30 to 34	10	15	11	10	6
35 to 39	16	24	15	16	15
40 to 44	16	23	15	17	14
45 to 49	13	11	13	12	17
50 to 54	10	4	10	13	13
55 to 59	7	3	8	8	12
60 to 64	7	1	8	6	13
65 to 69	6	1	6	6	5
Over 70	2	-	1	1	1
	100%	100%	100%	100%	100%

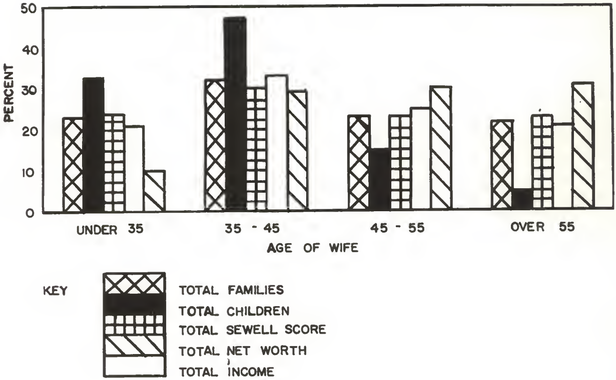

Fig. 3. Percentage comparison of net worth, income, Sewell Score, number of children, and the number of families by age of wife.

and Fig. 4 show the comparison of the percentage of families with the percentage of children, Sewell score, income and net worth of families when the families are classified by the stages of the life cycle by the Morse-Johnston Scale.

Distribution of Means. The distribution of mean income and net worth by age of wife and the Morse-Johnston Scale is discussed in this section. Families presently with or without children are distinguished, as are families who were planning, not planning, or have had children. The possible influence of inheritance and economic conditions on the net worth of families are discussed.

Average income computed for families grouped by the age of the wife tended to increase somewhat until the age group 50 to 54 and then to decline slightly. This same pattern of income change was true if only families with children were grouped by the age of the wife, but the average incomes of families with no children grouped by the age of wife, showed an erratic movement probably due to the small number of families. These data are shown in Fig. 5 and Table 11.

Families were arranged as to those who were planning, not planning, or families who have had children. The 60 families planning children had the lowest income ($3433). The 39 families who have had children average income of $3515 was less than the $3770 average income of the 70 families that were not planning children. The families not pla ning children were the highest, but not because they are husband and wife families that can give

Table 10. Percentage comparison of net worth, income, number of children, Sewell Score and number of families classified by Morse-Johnston Scale.

Stages in the life cycle	Percent of families	Percent of children	Percent of Sewell score	Percent of income	Percent of net worth
Beginning	2	-	2	2	1
Infant-planning	17	30	16	18	10
-not planning	1	1	1	-	1
Preschool-planning	8	14	8	8	6
-not planning	2	3	2	2	2
Grade school					
-planning	6	12	6	5	3
-not planning	19	29	20	23	22
High school					
-planning	1	-	1	1	-
-not planning	7	6	7	6	8
College-planning	-	-	-	-	-
-not planning	7	5	7	8	10
Recovery	22	-	22	21	24
Childless and not planning	8	-	8	6	13
	100%		100%	100%	100%

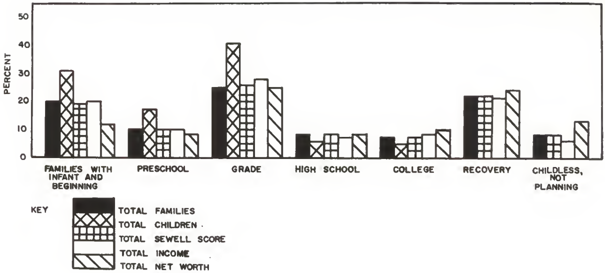

Fig. 4. Percentage comparison of net worth, income, number of children, Sewell Score, and number of families by Morse-Johnston Scale.

Table 11. Comparison of mean family income of all families, families with children, and childless families.

Age of wife	All families		Families with children		Childless families	
	Mean	Families	Mean	Families	Mean	Families
Under 20	$3000	1	$3000	1	$ -	0
20 to 24	2571	7	1400	5	5500	2
25 to 29	3266	15	3769	13	0	2
30 to 34	3526	19	3364	18	6000	1
35 to 39	3678	28	3777	27	1000	1
40 to 44	3821	28	3807	26	3000	2
45 to 49	3402	23	4865	13	2750	10
50 to 54	4542	18	5525	10	3000	8
55 to 59	3807	13	2250	5	3000	8
60 to 64	2980	13	2000	2	4500	11
65 to 69	3477	11	7000	1	1125	10
70 to 74	3000	1	-	0	3000	1
Over 75	5000	1	-	0	5000	1
All families	3601	178	3733	121	3320	57

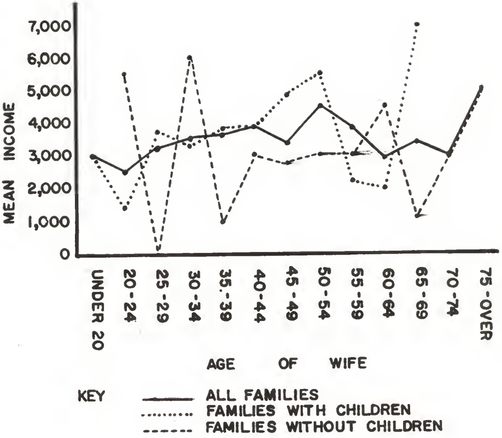

Fig. 5. Comparison of mean income for all families, childless families, families with children by age of wife.

full time to income earning and not be distracted by the children. The average income of the 14 childless families who intend to remain childless was $2675 whereas the income of the 65 families who have had children but have no plans for other children had an average income of $3950. Both groups of families were distributed essentially the same by the age of the wife; and their major distinction seemed to be the presence or absence of children in their lives. Either children assist directly in income earning or assist indirectly in giving parents an incentive to work and increase their income. This variation in mean values demonstrates the fallacious conclusion that can be drawn if the family life cycle is not recognized in the classification of families.

The mean net worth of families tended to increase as the age of the wife increased to age group 60 to 64 and then declined slightly. When families with children or families with no children were grouped by the age of the wife, net worth showed the same pattern of change. Fig. 5 and Table 12 show the changes in net worth for all families, families with children and families with no children.

Families grouped by the age of the youngest child indicated that the beginning families have the lowest mean income ($2750) and families with college age children have the highest income ($4166), but the mean income of the families with infant, preschool, grade school, and high school children did not show a constant increase but rather an erratic movement. Families in the recovery

Table 12. Comparison of mean family net worth of all families, families with children, and childless families by age of wife.

Wife's age	Mean net worth all families		Mean net worth families with children		Mean net worth childless families	
	Mean	Families	Mean	Families	Mean	Families
Under 20	$ 5,900	1	$ 5,900	1	-	0
20 to 24	8,100	7	7,200	5	$10,400	2
25 to 29	19,000	15	22,000	13	19,800	2
30 to 34	25,700	19	25,100	18	36,800	1
35 to 39	45,300	28	47,300	27	18,600	1
40 to 44	43,300	28	44,000	26	38,600	2
45 to 49	63,200	23	82,100	13	38,700	10
50 to 54	63,200	18	74,800	10	48,800	8
55 to 59	83,500	13	44,400	5	106,700	8
60 to 64	87,800	13	46,000	2	95,500	11
65 to 69	43,700	11	63,600	1	41,700	10
Over 70	55,000	2	-	0	55,000	2
All families	52,400	178	44,500	121	69,200	57

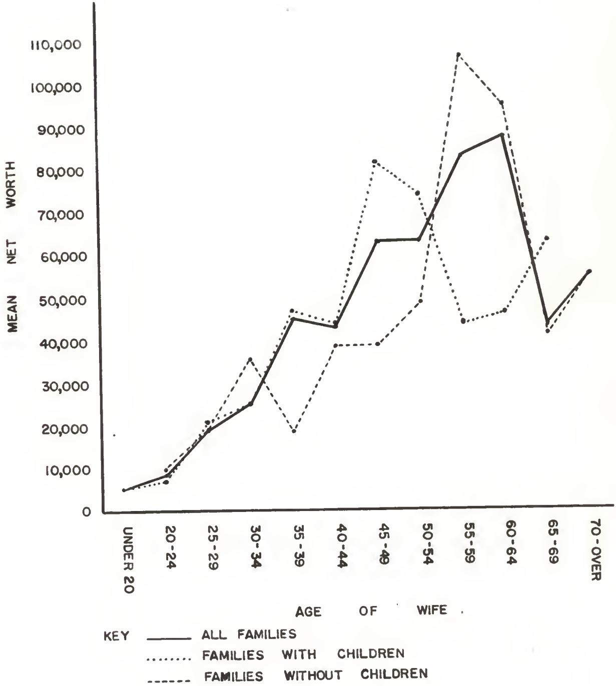

Fig. 6. Comparison of mean net worth of all families, childless families, families with children by age of wife.

stage of the life cycle had a slightly lower income than families with college age students, and the childless families who were not planning children had an income of $2875 which was only slightly higher than the beginning families. However, mean net worth of families tended to increase until the college stage of the life cycle before showing a slight decrease for the families in the recovery stage. Table 13 indicates the mean net worth and income for families during the stages of the life cycle of the family.

Table 13. Mean net worth and family income of families during stages of the life cycle.

Morse-Johnston Scale Stages of life cycle	Families	Average net worth	Average income
Childless and planning	4	$ 7,500	$2750
Infant	30	33,700	3833
Pre-school	19	37,600	3263
Grade school	46	58,500	3875
High school	14	59,500	3250
College	12	67,300	4166
Recovery	39	67,200	3515
Childless not planning	14	82,500	2875
All families	178	52,400	3601

Net worth of farm families was affected by inheritance; the families with the young aged children, age of wife under 35, tend to receive less inheritance than families with wife over 50 years of age. The average inheritance of the young (wife under 35) families is $2,950 compared to an inheritance of $8,000 for the older (wife over 50) families. Only 23 percent

of the younger families received an inheritance compared to 61 percent of the older families.

Since the 40-44 age groups showed a decline in net worth over the preceding age group, the number of years of marriage for these two groups were compared. Under normal condition using age of marriage at 22 years, this age group would have married in 1935. When years of marriage for the 35-39 age group and the 40-44 age group were compared, the figures indicated that the 40-44 age group had delayed marriage for three years. This would indicate that possibly factors other than family characteristics may influence the economic position of the family.

CONCLUSIONS

Methods of Classifying Families

The Morse-Johnston Scale was useful in classifying families by what was seemingly the logical divisions of the family life cycle. Its superiority to the Consumer Expenditure, Income and Savings method may be debated and was not tested.

The Consumer Expenditures, Income, and Savings method undoubtedly helps to explain the families economic position relative to the past. A family with older child has provided many items which the family with a young child has yet to provide. If one is interested in evaluating the provisions of a family for future financial security, the Morse-Johnston Scale would seem to be more appropriate. Another difference is that the Morse-Johnston

Scale for childless families is based on the age of the wife, most studies base data on the age of the husband or the breadwinner. There is a unique relation between age of wife and children that is perserved and anomalous situation of a husband age 70 and a child age 5 is avoided.

Neither study included children ever born, but was concerned solely with children present. The Consumer Expenditures, Income, and Savings method erred in not including oldest child though not at home to describe the frontier of the families. The Morse-Johnston Scale erred insofar as it fails to embrace all children to be had, (planned or not planned) in describing the family.

The Consumer Purchase Study and the Survey of Consumer

Finance methods of classification do not give adequate recognition to the stages of the life cycle, children over or under either 16 years of age are used as a basis for classification. The Consumer Purchase Study indicates the number of children in the family, but the Survey of Consumer Finance does not. The Morse-Johnston Scale indicates the stage of the life cycle and also the number of children presently in the family. The number of children and the age of the children in the family is an important factor in determining the economic welfare of the family and should be considered in family classification. The Morse-Johnston Scale does not recognize the number of children ever had, which may be of interest to students

of comparative well-being of families.

The Monroe's 16-family types recognized that all two-member families are not the same, and used the age of the wife to classify two- ember families. The Morse-Johnston Scale recognized the difference in two-member families by distinguishing between childless families that were planning children, those that are not planning and families that are in the recovery period of the life cycle after the children are independent.

Of significance and interest was the pattern of change in the families that were planning and not planning children when classified by the Morse-Johnston Scale. When families were grouped by the age of the youngest child and planning and not planning of children, 97 percent of the families with the youngest child an infant were planning other children while only 7 percent of the families with the youngest child in high school were planning children. The number of children did not seem to be an important factor in determining whether the family was complete. The families with four or more children were as apt to be planning children as were families with only one child. It was inconclusive whether the age of wife or age of youngest child is the more important influence in planning or not planning.

The Morse-Johnston Scale had a possible 80 classes. Thus, with only 178 families it was impossible to test fully the effectiveness of the Scale. However, when modified by dropping

the number of children designator, and in most cases the planning and not planning designator, the life cycle pattern seemed to be adequately represented.

Economic Characteristics of the Family

When the age of the wife or the stage of the life cycle was used as a basis for classifying families, the proportion of income and Sewell score were equal to the proportion of families in each age group or stage of the life cycle. However, families with less responsibilities for child care had the larger percent of net worth and also the larger average net worth. Families with greater responsibilities for child care had the smaller percentage and a smaller average net worth. Families with children did not enjoy higher incomes and they also have less net worth. Number of children and net worth of families seem to be the distinguishing characteristics in classifying families. Income and Sewell score were not significantly different. Inheritance received by the family may possibly be one factor that affects the net worth of families. The older aged families received a larger average inheritance than did the younger families, and the percent of families that received an inheritance was larger. Another factor that might affect the economic position of the family is the economic situation of the society in which the family begins or lives.

Recommendations

Only tentative conclusions regarding the economic characteristics and the classification of families can be drawn from this study since the number of families used was small. But the results indicated that further use of the Morse-Johnston Scale with a larger number of families would determine if it would be helpful in family classification to know the size of the family and whether the family was planning or not planning children. Further study of time of marriage or the year in which the husband and wife were married may be helpful in understanding some of the other factors that influence the economic well-being of families. Further study could determine the relationship of planning and not planning of children to: number of children already had, age of wife, age of youngest child, the economic status of the family, and the rural-urban and other sociological characteristics of the family.

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APPENDIX

CODE

Item	
1	Card Identification
2-3-4-5	Key Number of Family
6	Plans for College or Special Education within 10 years. 0 No information 1 No 2 Yes
7	Plans for Home Improvement - Within 10 years. Same code as item 6
8	Plans for Purchase of Appliance - Within 10 yrs. Same code as item 6
9	Plans for Cost of Child birth - Within 10 yrs. Same code as item 6
10 - 11	Number listed in family Actual number
12 - 13	Number in Household Actual number
14 - 15	Number in family (living at home) Actual number
16	Number of dependent children (Depends upon family for ½ or more of their support) Actual number
17	Number of independent children (Do not depend upon family for ½ or more of their support) Actual number
18	Number of infants (under 2 years of age) Actual number
19	Number of preschool children (under 6 yrs. of age) Actual number
20	Number of grade school children - 1st thru 8th grades. Actual number

21 Number of high school children - 9th - 12th grades.
Actual number

22 Number of children in college.
Actual number

23 - 24 Years of marriage
Actual number

25 - 26 Years of farming in Kansas
Actual number

27 - 28 Age of Husband

Under 20	01
20 - 24	02
25 - 29	03
30 - 34	04
35 - 39	05
40 - 44	06
45 - 49	07
50 - 54	08
55 - 59	09
60 - 64	10
65 - 69	11
70 - 74	12
75 - 84	13
85 and over	14

29 - 30 Age of Wife
Same code as item 27 and 28

31 Family type, composition groups from 1935-36 study.

Type I	1
Type II	2
Type III	3
Type IV	4
Type V	5
Type VI	6
Type VII	7
Type VIII	8
Type IX	9

32 - 33 Family types based on age of wife and the number and age of children.
Wife's age, no children

Under 30	01
30 to 39	02
40 to 49	03
50 to 59	04
over 60	05

Family with one child, age of child

Under 2	06
2 to 5	07
6 to 11	08
12 to 15	09
16 to 29	10

Family with two children

older child	younger child	
Both under 5		11
6 to 11	2 to 11	12
12 to 15	6 to 15	13
16 to 29	12 to 15	14
Both 16 to 29		15

Family with 3 or 4 children
all children under 18 16

Families not in any of these
types 17

34 - 35 Family type based on age of oldest child and number.

Oldest child under 6

one infant	01
1 child	02
2 children	03
3 children	04
4 or more	05

Oldest child 6 to 16

1 child	06
2 children	07
3 children	08
4 or more	09

Oldest child 16 to 18

1 child	10
2 children	11
3 children	12
4 or more	13

Oldest child 18 or over

1 child	14
2 children	15
3 children	16
4 or more	17

No children xx

36 - 37 Federal Reserve Board Classification

Age of head 18 - 44, no children under 18	01
Age 18 - 44, children under 18	02
Age 45 and over, no children under 18	03
Age 45 and over, children under 18	04

41 - 42	Net Farm Income		
	No information		00
	Net Losses		
	a.	$5,501 or more	11
	b.	4,501 to 5,500	12
	c.	3,501 to 4,500	13
	d.	2,501 to 3,500	14
	e.	1,501 to 2,500	15
	f.	501 to 1,500	16
	g.	Less than 500	17
	Net Incomes		
	h.	Less than 500	18
	i.	501 to 1,500	19
	j.	1,501 to 2,500	20
	k.	2,501 to 3,500	21
	l.	3,501 to 4,500	22
	m.	4,501 to 5,500	23
	n.	5,501 to 6,500	24
	o.	6,501 to 7,500	25
	p.	7,501 to 8,500	26
	q.	8,501 to 9,500	27
	r.	9,501 to 10,500	28
	s.	10,501 to 15,500	29
	t.	15,501 to 20,500	30
	u.	20,501 or more	31
43 - 44	Net Total Income		
	Same code as 41-42		
45	Husband Full or Part Time Work Away From Home.		
	No information		0
	No		1
	Yes		2
46	Wife Full or Part Time Work Away From Home.		
	No information		0
	No		1
	Yes		2
47	Children Part Time Work Away From Home.		
	No information		0
	No		1
	Yes		2

48-49-50-51	Net Worth (does not include cash value of life insurance)		
	(Omit 00)		
		No information	yyyy
		Less than $1,000	xxxx
		Actual amount	
52	Inheritance		
		No information	0
		No	1
		Less than 1,000	2
		1,001 - 5,000	3
		5,001 - 25,000	4
		over 25,001	5
53	Retired or not -		
		No	1
		Yes	2
54 - 55	Sewell Scale		
		Actual score	

THE RELATIONSHIP OF SELECTED ECONOMIC INDICES TO THE FAMILY LIFE CYCLE

by

ALBERTA HENRIETTA BUIS JOHNSTON

B. S., University of Nebraska, 1943

AN ABSTRACT OF

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This thesis is concerned with methods of classifying families in order to represent their stages in the life cycle.

Families have been classified by a variety of characteristics and methods for the study of their economic status. Some of the more widely used indices are the age of husband, number of children, age of family members, size of family, income, and net worth. The major studies of family income and expenditures have combined several of these indices in order to classify families into more homogeneous types. For example, the Consumer Expenditures, Income and Saving study in 1950 combined the age of the oldest child with the number of children in the family, making 18 types of husband-wife families. The Consumer Purchase Study combined size of family and age of members other than parents to make nine types. Dr. Day Monroe expanded this to 16 types, and the Survey of Consumer Finances presently reports only four types of families.

Evaluation studies of the comparative well-being of families would be more effective if families were classified by stages of the life cycle. For example, a family of size two of age 60 would have different economic needs than a family size two of age 20 years. The family life cycle is the term used to represent the series of changes through which the family passes from its formation until dissolution.

The recently devised Morse-Johnston Scale of the family life cycle presumably represented an improved technique for reflecting the stages of the life cycle, <u>ex-ante</u>. The scale

applied to husband-wife families with the age of the youngest child as the basic criteria for classification. The full scale considers number of children present and the family plans for expansion. A modified form was used in this study. The stages used were:

1. beginning -- newly married, planning children
2. infant -- with the youngest child age two or under
3. preschool -- with youngest child of preschool age
4. grade school -- with youngest child of grade school age.
5. high school -- with the youngest child of high school age
6. college -- with the youngest child of college age, 18 or older
7. recovery -- childless because children have left home
8. retirement -- childless because children have left home
9. childless -- have never had children and are not planning children.

The purpose of this study was to explore the possible relationship of net worth, net income, Sewell Scale of the socio-economic status, and the number of children with the age of the wife and with the Morse-Johnston Scale of family life cycle. Selected data from ten of the counties used in the Kansas Agricultural Experiment Station Project, Organized Research 427, "Economic Status and Plans for Future Security of Farm Families" were used.

Families classified by age of wife and by the Morse-Johnston Scale were distributed essentially the same as by income and Sewell Score. A large proportion of the children were concentrated

among the families in the early stages and with younger wives. By contrast, these families held a small proportion of the net worth. None of the established methods of classifying families distributed families in accordance with their distribution by the Morse-Johnston Scale. Thus either the former methods do not reflect stages in the life cycle or the Morse-Johnston Scale fails to do so. While the Consumer Expenditure Income & Saving classification might be so construed, its use of the oldest child tends to reflect stages _ex post_ while the Morse-Johnston Scale based on the youngest child reflects stages _ex ante_.

It is recommended that the Morse-Johnston Scale be used with more data to determine its full value. With a large study it also might be possible to measure the degree of association between families planning and not planning and selected socio-economic characteristics.

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It is recommended that the Morse-Johnston Scale be used with more data to determine its full value. With a large study it also might be possible to measure the degree of association between families planning and not planning and selected socio-economic characteristics.